



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

September 16, 2010

Kenny McDaniel, Manager
C/o North Steens Transmission Line Project Lead
Bureau of Land Management
Burns District Office
28910 Highway 20 West
Hines, Oregon 97738

Re: U.S. Environmental Protection Agency (EPA) Comments on the North Steens
Transmission Line Project (Project) Draft Environmental Impact Statement (DEIS).
(EPA Project Number 09-042-BLM)

Dear Mr. McDaniel:

EPA has reviewed the Bureau of Land Management's (BLM) DEIS for the North Steens Transmission Line Project in Harney County, OR. Our review has been conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The DEIS considers the Proposed Action of authorizing a right-of-way across lands administered by the BLM and U.S. Fish and Wildlife Service (USFWS) for the construction and operation of a transmission line and access roads associated with the Echanis Wind Energy Project. Three alternatives are considered: Alternative A, the No Action Alternative; Alternative B, the Proposed Action of granting a right-of-way (ROW) for construction and operation of an access road and transmission line across lands administered by the BLM and USFWS, including the Connected Action of Columbia Energy Partners constructing and operating a wind farm and associated facilities on privately held land; and, Alternative C, wherein a northern transmission line route - rather than a transmission line through USFWS-managed lands - is considered as part of the Connected Action (DEIS, Abstract). The DEIS also considers three additional wind farms - West Ridge, East Ridge and Riddle Mountain. Each of the four wind farms considered in the DEIS would include 40 to 69 wind turbines and supporting facilities (access roads, transmission sub-stations etc.).

We appreciate BLM's efforts to analyze the potential impacts associated with the ROW as well as the impacts associated with the Echanis, West Ridge, East Ridge and Riddle Mountain Wind Energy Projects. We believe analyzing the potential impacts of all of these facilities is appropriate.

EPA review has identified environmental impacts that should be avoided or adequately mitigated for full protection of the environment:

- Sediment input from roads to sediment impaired waterbodies.

- Noise and visual impacts to wilderness values.
- Adverse impacts to wildlife and wildlife habitat.

While the DEIS expressly discloses the above environmental impacts, the majority of our comments are focused on the adequacy of the impact statement. We believe that the DEIS does not contain sufficient information for EPA to fully assess all environmental impacts that should be avoided in order to fully protect the environment. Below, we summarize aspects that we consider to be insufficient in the DEIS. All of these issues are discussed in detail in our enclosed comments.

- The DEIS does not sufficiently support with facts and analysis the underlying need for the Project.
- The DEIS does not categorize and disclose Greater Sage-Grouse habitat according to the Oregon Department of Fish and Wildlife's Habitat Mitigation Policy.
- The DEIS does not sufficiently establish that impacts to visual resources are not significant.
- The DEIS does not sufficiently analyze and disclose noise impacts from the West Ridge and East Ridge Wind Energy Projects.
- The DEIS does not sufficiently disclose which mitigation measures minimize adverse impacts to wilderness values.
- The DEIS inconsistently links land use plans, laws, regulations, policies, permits, approvals and consultation requirements to the Project.
- The DEIS inconsistently analyzes cumulative effects to visual resource and socio-economic impacts.
- The DEIS does not sufficiently disclose the control strategy for noxious weeds that may become established as a result of the project.
- There are numerous errors and inconsistencies throughout the tables and text of the visual resource analyses.

We recommend that the above issues be fully addressed in the FEIS. Where additional information and analysis identifies additional impacts; appropriate, specific, mitigation should be incorporated into the action alternatives.

Though this Project would result in adverse impacts and the DEIS has important insufficiencies that need attention, we are aware of the Project's substantial potential economic and environmental benefits. We believe the Project is consistent with national policy (e.g., the Energy Policy Act of 2005) and States' renewable energy goals.

With the numerous issues involved in this Project, we believe that the facts and analysis supporting the identification of an environmentally preferred alternative are especially important. The Greenhouse Gas Emissions (GHG) aspect of the no-action alternative (DEIS section 3.16.3.1) is an example of a key conclusion – related to the identification of an environmentally preferred alternative - which should be supported with adequate facts and analysis. Our enclosed comments aim to assist your identification of the environmentally preferred alternative.

While EPA's mission generally lends itself to support for the environmentally preferred

alternative we appreciate and respect the Responsible Official's duty to make a decision based on all relevant factors (40 CFR § 1505.2 (b)).

Based on our review, we have assigned the DEIS a rating of Environmental Concerns – Insufficient Information (EC – 2). EPA intends to work with BLM and USFWS to reduce impacts.

If you have any questions regarding EPA's comments, please contact me at (206) 553-1601, or Erik Peterson of my staff at (206) 553-6382 or by email at peterson.erik@epa.gov.

Sincerely,



Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

Enclosure:

EPA Region 10 Detailed Comments for the North Steens 230-kv Transmission Line Project
Draft Environmental Impact Statement
EPA Rating System for Draft Environmental Impact Statements

EPA REGION 10 COMMENTS FOR THE NORTH STEENS 230-KV TRANSMISSION LINE PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT

Purpose and Need

While we generally believe that the DEIS's purpose statement is sufficient, "The purpose of BLM's action is to grant, grant with conditions, or deny the Echanis application for use of public land managed by the BLM Burns District Office..." (DEIS, p. 1.4-3), we do not believe that the DEIS sufficiently supports the underlying need for the project with facts and analysis (40 CFR 1502.13).

Purpose and need statements should address three core concepts: (i) the underlying problem or deficiency, (ii) facts and analyses supporting the problem or deficiency in the particular location at the particular time and (iii) the context or perspective of the agency mission in relation to the need for action. The DEIS's purpose and need statement sufficiently addresses two of these three core concepts: the context of the agency's mission (e.g., FLPMA of 1976), and, a general summary of the underlying problem or deficiency (e.g., DEIS, 1.2-2).

We do not believe the project's underlying problem or deficiency is sufficiently supported with facts and analysis. The DEIS states that the Project would, "...reduce constraints on existing power generation...and improve system reliability and flexibility." (DEIS, 1.2-2). An aspect of addressing these problems is, as we understand from the DEIS, to produce peak power during winter months - "...which would be beneficial to the integrated transmission and power system." (DEIS, 3.19-55). EPA agrees that these are indeed underlying problems and deficiencies that could potentially be addressed through the Project. We are concerned that the only specific reference supporting this key conclusion appears to be a newspaper article.¹

Recommendation

- We recommend the FEIS include additional facts and analyses which support how the North Steens 230-kV Transmission Line and the connected Echanis Wind Energy Project will "reduce constraints in existing power generation and transmission infrastructure to meet current and future energy demands." We are interested in how producing "...energy without capacity..." (DEIS, 3.18-4) reduces constraints to meet current and future energy demands. Consider findings from the Northwest Power and Planning Conservation Council, such as, "Continued wind development and other variable-output energy resources (wave power, tidal current power, and solar photovoltaics) will eventually require adding firm capacity and balancing reserves to maintain the reliable operation of the power system."²

Water Resources

We appreciate the DEIS's disclosure of potential impacts to impaired waterbodies: "Greater sediment inputs from roads could exacerbate the sediment impairment already present in Kiger Creek and the Donner und Blitzen River..." (DEIS, p. 3.2-20), and, "Any disturbance of

¹ http://seattletimes.nwsources.com/html/business/technology/2008106953_windpower12.html

² <http://www.nwcouncil.org/energy/powerplan/6/final/SixthPowerPlan.pdf>

the existing road that will be used near Cucamonga Creek may increase sediment input, which would exacerbate the sediment impairment already present in the creek" (DEIS, p. 3.2-21). Clear statements such as these are exemplary.

The DEIS connects the above adverse impacts to impaired waters with mitigation, "These potential effects would be minimized by the design features and best management practices (BMPs) described in Chapter 2." (DEIS, p. 3.2-20). Mitigation for impacts to impaired waters is appropriate. Our concern is that it is unclear which of the design features and BMPs described in Chapter 2 actually minimize the specific potential effects to the water bodies mentioned above.

Recommendation

- Where potential impacts to impaired water bodies are identified, the FEIS should disclose the specific actions which will be taken to avoid, mitigate and/or minimize the impacts. General BMPs do not necessarily mitigate specifically identified impacts.

Air Quality

EPA strongly supports reducing GHG and criteria pollutant emissions and believes that judging the scale of these offsets against a renewable energy project's unavoidable adverse effects is a key aspect of identifying the environmentally preferred alternative. DEIS section 3.16.3.1 includes important information for the future identification of an environmentally preferred alternative.

Under the No Action Alternative, the proposed transmission line and the connected wind farm would not be installed; therefore, the generation of renewable energy at this location would not occur. This opportunity loss might be offset by mixed generating resources, including natural gas, coal, hydroelectric, nuclear, solar, wind, geothermal, and biomass. The proposed wind farm would have had an average annual generating capacity of approximately 463,000 megawatt-hours³ which might otherwise cause to be emitted elsewhere about 194,000 metric tons of CO₂ equivalents annually from mixed generating resources serving the Northwest region⁴ (The Climate Registry General Reporting Protocol, Version 1.1, 2008). In addition to GHG, criteria pollutants (VOC, CO, NOX, SOX, PM₁₀, PM_{2.5}) from natural gas, coal, and biomass generating resources might be emitted elsewhere. (DEIS, 3.16-12)

Because we believe this section is an important part of identifying the environmentally preferred alternative we are concerned that the DEIS does not discuss the accuracy of these conclusions or the methodology used.

³ Assumes 46 mapped 2.3 MW turbines operating at 50 percent average annual capacity factor.

⁴ GHG emissions are 926 lb/MW-hr or 0.42 tonnes/MW-hr as CO₂ eqv.

Recommendation

- We recommend that the FEIS include additional information on how The Climate Registry General Reporting Protocol, Version 1.1 was used to accurately estimate GHG offsets from the Echanis Wind Energy project. Key issues to discuss may include, but are not limited to: the unique mix of Pacific Northwest power generating sources; factors to be considered when power is sold to another utility (E.g., South California Edison); and, the current and future state of “firm capacity” and “balancing reserves” to create flexibility for wind energy. Please disclose how and whether these – or other pertinent – issues were accounted for in determining the DEIS’s GHG emissions factor of 926 lb/MW-hr CO₂ eqv. Also, discuss the relative certainty associated with the conclusions stated in DEIS section 3.16.3.1.

Fish, Wildlife and Special Status Animal Species

We support the applicant’s recognition of and commitments to ODFW’s Habitat Mitigation Policy (OAR 635.415) (DEIS, p. 3.5-29, 3.19-19). We also support the establishment of a Technical Advisory Committee (TAC) which would, “...propose a methodology for determining the effect on grouse and other wildlife, and a procedure for setting appropriate mitigation...” (*ibid.*).

The applicant’s commitment to implementing a 2:1 mitigation ratio for Category 2 habitat that may be lost due to project construction and operation appears to be generally consistent with the Habitat Mitigation Policy at OAR 635.415.0025(2)(b)(B).

Mitigation of impacts, if unavoidable, through reliable in-kind, in-proximity habitat mitigation to achieve no net loss of either pre-development habitat quantity or quality. In addition, a net benefit of habitat quantity or quality must be provided. Progress towards achieving the mitigation goals and standards shall be reported on a schedule agreed to in the mitigation plan performance measures. The fish and wildlife mitigation measures shall be implemented and completed either prior to or concurrent with the development action.

We assume that the commitment to a 2:1 ratio compensatory mitigation ratio for Category 2 habitat is based on an assumption that Category 2 habitat is present. The DEIS does not disclose the amount or the location of Category 2 habitat which would be impacted.

The Habitat Mitigation Policy establishes consistent goals and standards to mitigate impacts to fish and wildlife based on six categories of habitat. While the Policy provides a mechanism to mitigate for impacts to Category 2 habitat, the Policy provides no such mechanism for Category 1 habitat. According to OAR 635.415.0025(1) (a), the mitigation for Category 1 habitat is, “(A) Avoidance of impacts through alternatives to the proposed development action; or (B) No authorization of the proposed development action if impacts cannot be avoided.”

While the Project’s 2:1 ratio for Category 2 habitat appears to be consistent with the Habitat Mitigation Policy, we are unsure whether or not the Project would impact Category 1 habitat.

Recommendation

- We recommend that the FEIS categorize and disclose the wildlife habitat in the project area according to ODFW's Habitat Mitigation Policy. ODFW's "Recommendations for Greater Sage-Grouse Habitat Classification Under Oregon Department of Fish and Wildlife's Fish and Wildlife Habitat Mitigation Policy" provides specific suggestions for categorizing Greater-Sage Grouse habitat.⁵

Noise

We are concerned about noise impacts to wilderness values and campgrounds. The noise analysis for the Echanis Wind Energy Project sharply defines the issue and is generally sufficient. The cumulative effects noise analysis for the East and West Ridge Wind Energy Projects, on the other hand, is not sufficient.

Summary quantitative conclusions disclosed for the Echanis Wind Energy Project such as the following are useful and help to sufficiently disclose noise impacts.

The nearest recreational receptor to the wind turbine Project Area is Receptor #36 (Mann Lake Campground), approximately 4,337 meters (2.6 miles) away. At this location, the increased noise level caused solely by wind turbine operation is estimated at between 31 and 38 dBA." (DEIS, 3.17-9)

This quantitatively estimated noise impact to Mann Lake Campground is qualitatively described in Table 2.1-7, as "There could be a slight increase in noise levels at Mann Lake Campground."

We believe completing and disclosing a similar analysis to the one described above for the East and West Ridge Wind Energy Projects and Fish Lake Campground would more sufficiently disclose the cumulative impacts of the Project.

Recommendation

- We recommend that the FEIS disclose a quantitative estimate, similar to the estimate for Echanis and Mann Lake Campground, of the noise impacts from the East and West Ridge Wind Energy Projects on Fish Lake Campground.
- We recommend the FEIS discuss how a 31 to 38 dBA increased noise level at Mann Lake Campground is a "slight increase in noise levels". According to the DEIS, a "...10 dBA change is subjectively heard as approximately a doubling in loudness and can cause an adverse response." (DEIS, 3.17-2 from EPA, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. 1974). Disclosing noise impacts in comparative form (e.g., a microwave in a quiet room) may be an effective way of sharply defining the issue for the public and the decision maker.

⁵ http://www.dfw.state.or.us/conservationstrategy/docs/Sage-Grouse_Habitat_Mitigation_Recommendations_FINAL%208-7-9.pdf

- New wind turbine technology may present an opportunity to mitigate specifically identified noise impacts. See the Department of Energy's Advanced Research Projects Agency – Energy website for more information on “High Efficiency Shrouded Wind Turbine(s)”⁶

Wilderness

We appreciate BLM's efforts to identify the specific impacts upon wilderness resources and upon public use of wilderness areas. Based on the DEIS's identification of adverse impacts to wilderness resources (“...the cumulative effects from these projects (*all four wind energy projects and the transmission line*) would permanently diminish these (*wilderness*) values...” DEIS, 3.19-47). We support efforts to minimize impacts to wilderness values and, according to the DEIS, mitigation for impacts to wilderness values are compliance with the, “...conditions of approval related to visual resources set forth in Exhibit B to the Harney County Conditional Use Permit No. 07-14 issued on April 18, 2007, and revised on May 21, 2008. (DEIS, p. A-28)

We are unsure which conditions within the conditional use permit would minimize impacts in to wilderness values.

Recommendations

- We recommend that the FEIS disclose how mitigation measures for wilderness values minimize specifically identified effects. Please discuss the effectiveness of relevant mitigation measures – such as those found in the Harney County Conditional Use Permit - for the following identified effects.
 1. Acres with views of project facilities, as identified in Table 3.19-5.
 2. Effects to opportunities for primitive and unconfined recreation and sense of solitude. We are particularly interested in which specific mitigation measures minimize noise effects.

Conformance with Federal Laws, Regulations, and Policies

We are concerned that the DEIS inconsistently links land use plans, laws, regulations, policies, permits, approvals and consultation requirements to the Project. Disclosing the purposes of an Act - such as the purposes of the Steen Mountain Cooperative Management and Protection Act of 2000 - without linking those purposes or other elements of the law, regulation or policy to the Project is more encyclopedic than analytic. Explicitly listing and disclosing the implications for the Project from, for example, the Harney County Comprehensive Plan and Planning Commission are more analytic and preferred.

Recommendations

- We recommend that the FEIS's version of Section 1.7 include additional information. Please address the following issues.

⁶ <http://arpa-e.energy.gov/ProgramsProjects/BroadFundingAnnouncement/RenewablePower/BreakthroughHighEfficiencyShroudedWindTurbine.aspx>

1. The Bald and Golden Eagle Protection Act (BGEPA) should not be listed as a sub-section of the Migratory Bird Treaty Act (MBTA). We recommend the BGEPA be addressed in a separate sub-section.
2. Table 1.1-1 notes that a USFWS requirement for the project is, "A Programmatic or Individual Incidental Take Permit for bald or golden eagles pursuant to the BGEPA." (p. 1.8-20). USFWS is not currently issuing incidental take permits for bald or golden eagles. Please describe how this project will meet BGEPA requirements. We are aware of the BLM's instructional memorandum to require Avian Protection Plans. If such a plan is required for this project, we recommend that the Avian Protection Plan addresses the impacts of the wind energy project(s) as well as transmission lines.
3. According to the DEIS, it is illegal to "take" migratory birds, and, "Activities associated with the construction and operation of the proposed transmission line project will be subject to the provisions of the MBTA." (DEIS, p. 1.8-19). Please disclose the specific mitigation measures or project design features for this Project which ensure compliance with MBTA provisions.
4. Discuss the relationship, if any, between 43 CFR 2804.26 and Section 122(a) of the Steen's Act. We are unclear how the project is consistent with Section 122(a), which states that "Development on public and private lands within the boundaries of the Cooperative Management and Protection Area which is different from the current character and uses of the lands is inconsistent with the purposes of this Act." In particular, it is not clear that the intended development is no different from the current character and use of the land and therefore consistent with the Steens Act. Please provide an explanation of this issue.
5. Because the manager of the Malheur NWR must make a decision to grant a ROW across the refuge that contradicts 340 FW 3.3, "It is the policy of the Service to discourage the type of uses embodied in right-of-way requests." we believe it is especially important for the FEIS to sufficiently disclose how granting the ROW for the North Steen's Transmission Line would contribute, "...to the achievement of the national wildlife refuge purposes or the National Wildlife Refuge System mission" (50 CFR 29.1). We recommend that the FEIS include data and analysis which more sufficiently discloses how compensatory mitigation measures on the refuge would ensure consistency with 50 CFR 29.1.

Amendments to Resource Management Plan

We are concerned about BLM's overall conclusion that a RMP amendment(s) are unnecessary because, "...lands affected by the proposal are generally open to right-of-way development..." (DEIS, 1.7-9). While this is generally true, we note that lands affected by the proposal do appear to include "avoidance areas". For example, Alternative C routes the transmission line through the Kiger Mustang Area of Critical Environmental Concern (ACEC) – an RMP designated avoidance area.

Recommendation

- The FEIS should briefly discuss how granting a ROW permit through an avoidance area does not require an RMP amendment.

Visual Resources

We are concerned that, of the 25 Key Observation Points (KOPs) listed in Tables 3.9-2, 3.9-3 and 3.19-1, ten would have a level of change that appears to be inconsistent with BLM Visual Resource Management (VRM) objectives. In other words, over a third of the KOPs used in the DEIS's analysis would experience moderate or high visual changes where the objective is to preserve or retain the existing character of the landscape.

We recognize that the Echanis, East Ridge, West Ridge and Riddle Mountain Wind Energy Projects would be located on private lands and are not subject to the BLM's visual resource management objectives. We also respect the applicability of Section 6.02(A)(2) (Scenic Quality) of the Harney County Comprehensive Plan and state Goal 5 rules (OAR 660, division 23).

We support the State of Oregon's "General Standards for Siting Facilities" (OAR 345-022-000). For this project's visual resource impacts, we support meeting the "Scenic Resources" standards at OAR 345-022-080. According to OAR 345-022-0080,

- (1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic resources and values identified as significant or important in local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area described in the project order.
- (2) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

The Oregon Energy Facility Siting Council is responsible for issuing site certificates for jurisdictional energy facilities. Each of the four wind energy projects considered in the DEIS is sub-jurisdictional. Regardless, EPA's perspective on visual resources is similar to OAR 345-022-0080; significant adverse impacts to scenic resources and values identified as significant or important in local land use plans, tribal land use management plans and federal land management plans for any lands located within the analysis area described in the project order should be avoided or mitigated.

Because significant adverse impacts are defined by this regulation through the context of local and federal land use decisions, we believe it is important to clearly explain the visual impacts of the project in relationship to relevant local, state and federal laws and plans. Those most relevant for the project appear to be the visual resource management objectives identified in the two RMP-RODs, the Harney County Comprehensive Plan and the State of Oregon's "Goal 5" lands.

Recommendations

- We recommend that the FEIS summarize and disclose how the Echanis, East Ridge, West Ridge and Riddle Mountain Wind Energy Projects are consistent with relevant specific components of the Harney County Comprehensive Plan, Oregon's "Goal 5" rules and "General Standards for Siting Facilities" (OAR 345-022-000). Consistency with the relevant specific aspects of the above plan, rules and general standard is an important step in establishing that the Project will not result in significant adverse impacts to scenic resources and values.

Cumulative Impacts

We are concerned that the cumulative effects analysis deals with visual resources and socio-economic benefits inconsistently. Table 3.19-1 discloses project impacts to visual resources from the East Ridge, West Ridge and Riddle Mountain Wind Energy Projects. Impacts to visual resources from the Echanis Wind Energy Project are accounted for elsewhere (E.g., the main body of the DEIS and Appendix D). Table 3.19-2 and Table 3.19-3; on the other hand, discloses socioeconomic employment and income effects from all four wind projects as well as the transmission line.

Recommendation

- We recommend that the cumulative effects section of the FEIS account for effects to resources consistently. If the cumulative socioeconomic effects of all four wind projects as well as the transmission line are disclosed in the cumulative effects section then, all other resources should be analyzed in the same manner.

Agency Decisions to be Made

The DEIS states, "The specific decisions that will be made by BLM, USFWS, the U.S. Army Corps of Engineers (USACE), and BPA based on the analysis in the EIS are described below." (DEIS, 1.4-3). The decisions to be made by USACE and BPA are, however, not listed.

Recommendation

- We recommend that the FEIS identify the decisions to be made by USACE and BPA in the "Agency Decisions to be Made" section.

Noxious Weeds

The spread of noxious weeds is one of the greatest threats to biodiversity. We therefore appreciate that the Project has a noxious weed control strategy. An effective noxious weed control strategy has two main components: (i) controlling/ minimizing the rate of spread of noxious weeds, and, (ii) controlling/ reducing/ eliminating noxious weeds once they have been introduced and/or established. Generally the DEIS sufficiently accounts for the first aspect of

noxious weed control – the rate of spread or introduction. The DEIS does not sufficiently disclose, however, the control strategy for noxious weeds that may become established as a result of the project.

We agree that limiting vehicles to certain areas, cleaning vehicles and adhering to a revegetation plan will help to limit the spread and establishment of noxious weeds (DEIS, A-6). Limiting spread and establishment does not, however, repair measurable damage (DEIS, p. A-7). Repairing measurable damage from noxious weeds requires careful and consistent short, medium and long term management. State and Federal herbicide application guidelines – which are referenced in the DEIS - include a wealth of information on noxious weed management. The DEIS should disclose those aspects which are most relevant to the requirement for the applicant to repair any measurable damage.

Recommendations

- We recommend Appendix A of the FEIS include additional information on specific control measures for any noxious weeds which are introduced and established as a result of the project. Clearly differentiate between those measures which are meant to minimize the risk of spread from those measures which are designed to repair measurable damage.

Biological Soil Crusts (BSC)

We agree with the DEIS's conclusion that, "BSCs provide numerous ecological benefits by retaining moisture, suppressing weeds, fixing atmospheric nitrogen, and increasing organic material." (DEIS, 3.1-15). The ecological communities of the project area have been shown to support well developed BSCs. We appreciate the DEIS's consideration of this important resource, but believe the impacts disclosed in the DEIS may underestimate actual impacts.

The DEIS estimates the "potential destruction to BSCs..." at 1.87 acres for transmission poles and .69 acres for the interconnection station (ICS) (DEIS, 3.1-17 and elsewhere). These estimates are based on the immediate area around transmission poles. The same methodology is used for wind turbines. We are concerned that the actual impacts to BSC may be larger due to the fact that the area impacted by overland travel is substantially larger (E.g., 25.28 acres for the proposed action, DEIS, 3.3-28). BSCs could be adversely impacted by overland travel because of their relative sensitivity to disturbance and length of time required to fully develop.

Recommendation

- We recommend the FEIS estimate the area of BSCs which would be impacted by overland travel.

Consultation with Tribes

EPA commends the BLM for their substantial efforts to engage affected tribes and we appreciate section 4.2.4's summary of the Government to Government Consultation Process. We look forward to seeing an updated summary of the consultation process and encourage the BLM to continue to work to ensure that tribes' treaty rights and privileges are addressed appropriately.

General Comments and Recommendations

- We recommend that the FEIS change all references to "Chapter(s)". The document is actually organized according to "Sections".
- We recommend that the FEIS eliminate general statements which are linked to specific impacts such as, "These potential effects would be minimized by the design features and best management practices (BMPs) described in Chapter 2." These general statements do not sufficiently disclose the effectiveness of mitigation measures for specific impacts.
- Fix the following inconsistency. Table 3.9-2 lists the effect from the Echanis Wind Energy Project on KOP 46 Mann Lake as "moderate" while the text states that the effect would be high - "...and a high effect level would be experienced from KOP 46." (DEIS, D-11)
- Fix the following inconsistency. Table 2.1-9 states that KOP 61, "Steens Overlook", would have a low level of effect from the Echanis Wind Energy Project. Table D.1-2 and the text in Appendix D (p. D-18) states, "East Rim Overlook", also KOP 61, would have a "Moderate" effect from Echanis.
- Fix the following inconsistency. Table 2.1-9 states that Alternative B (West Route) would have a "Low Effect for all KOPs". Tables 3.9-3 and D.1-3 both show that there would be a "Moderate" effect to visual resources at KOP 3 Diamond Lane from Alternative B (West Route)"
- Fix the following inconsistency. Table 2.1-9 and Table D.1-2 state that East Steens Loop (KOP 48) would have a "moderate level of change". Text in Appendix D states that KOP 48 would have "Impact Level: Low". (DEIS, D-17)

**U.S. Environmental Protection Agency Rating System for
Draft Environmental Impact Statements
Definitions and Follow-Up Action***

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.